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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,071	10/10/2003	Neil Westervelt	14441	9596

293 7590 06/23/2004

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EXAMINER

RODRIGUEZ, PAMELA

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,071

Applicant(s)

WESTERVELT, NEIL

Examiner

Pam Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The formal drawings were received on January 21, 2004. These drawings are approved by the examiner.
2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show Section line 4-4 in Figure 3 as described in the specification in the description of Figure 4 on page 9. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective

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action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: element 14 (the tow bar assembly referenced on page 10 line 9). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" has been used to designate both a clamp on page 10 line 14 and a one way clutch on page 11 line 10. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelt in view of U.S. Patent No. 6,035,977 to Marasco and further in view of Frescura.

Regarding Claim 1, Westervelt discloses a towed vehicle braking system 10 (see Figure 1) having most all the features of the instant invention including: a first brake applying cable 73 having a first end (see Figure 1 and the end of cable 73 nearest element 74) for connecting to a brake actuating pedal 74 of a towed vehicle 12 and a second end 75 for connecting to another portion of the braking system, wherein the first cable 73 extends through a guide housing 14 adapted to be mounted to the towed vehicle 12 forwardly of the brake pedal 74 (see Figure 1), wherein the housing 14 includes a one way clutch mechanism (readable as element 46) for maintaining brakes of the towed vehicle applied when activated, and a second cable 72 having a first end for connecting to another portion of the braking system and a second end for connecting to a towing vehicle 11 (see Figure 1).

However, Westervelt does not disclose the first and second cables being connected to a break-away link member nor a means mounted to the housing for applying a force on the first cable to prevent movement of the first cable until a predetermined load is placed on the first cable by the towed vehicle.

Regarding the break-away link member, Marasco '977 is relied upon merely for his teachings of a towed vehicle braking system (see Figures 1 and 2) having a brake applying cable 12 connected to a break-away link member 10 with one end connected to the towed vehicle and one end connected to the towing vehicle (see Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the first and second cables of Westervelt to be connected to a break-away link member as suggested by Marasco '977 as the addition of such a member would bring the towed vehicle to a controlled stop after disengagement with the towing vehicle. This break-away link member would prevent the towed vehicle from careening out of control if it was to inadvertently become disattached from its towing vehicle.

Regarding the means mounted to the housing for applying a force on the first cable to prevent movement of the cable, Frescura is relied upon merely for his teachings of a brake actuating cable 14 housed in a housing 1 (see Figure 1), wherein means 8/9 is mounted to housing 1 for applying a force on the cable 14 to prevent movement of the cable until a predetermined load is placed on the cable (see column 1 line 68-column 2 line 17 and Claim 3 of the patent).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the housing of Westervelt, as modified, to include a means for applying a force on the first brake applying cable to prevent movement of the cable until a predetermined load is placed on the cable by the towed vehicle as suggested by Frescura in order to provide an additional stop means to the brake assembly to prevent premature braking of the towed vehicle.

Regarding Claim 2, see member 8 of Frescura having an end engageable with cable 14 within the guide housing 1, wherein the member 8 is selectively radially adjustable relative to the cable via head 9 of the member 8 (see claim 3 of the Frescura patent).

Regarding Claim 3, see bolt 8 having a threaded portion and manually engageable outer end portion 9 (see Figure 1 of Frescura).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelt in view of Marasco '977 in view of Frescura as applied to claims 1-3 above, and further in view of Herbert.

Westervelt, as modified, discloses most all the features of the instant invention as applied above, except for the bolt being designed to shear at a predetermined load.

Herbert is relied upon merely for his teachings of a bolt 32 used in a towing vehicle arrangement which is designed to shear upon a predetermined load (see column 2 lines 66-73).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the bolt member of Westervelt, as modified, to

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shear at a predetermined load, as suggested by Herbert, as an alternate means for the member to allow the brake cable to move and actuate the brakes of the towing system. As long as the member functions to hold the cable in place until a predetermined load is reached, the means used to then actuate the towing system brakes is arbitrary.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Nos. 3,682,278 and 3,881,577 both to Wherry et al disclose towed vehicle braking systems having break-away link members connected to brake cables.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 6 am -4 pm and Tuesdays 6 am -12 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pam Rodriguez
Primary Examiner
Art Unit 3683

6/15/04

PR
06/15/2004